UnHack App Documentation

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Visual Communication 2014 -16

Faculty Guide:
Prof. Venkatesh Rajamanickam

Course:
Visual Design for Interactive Systems

Contents

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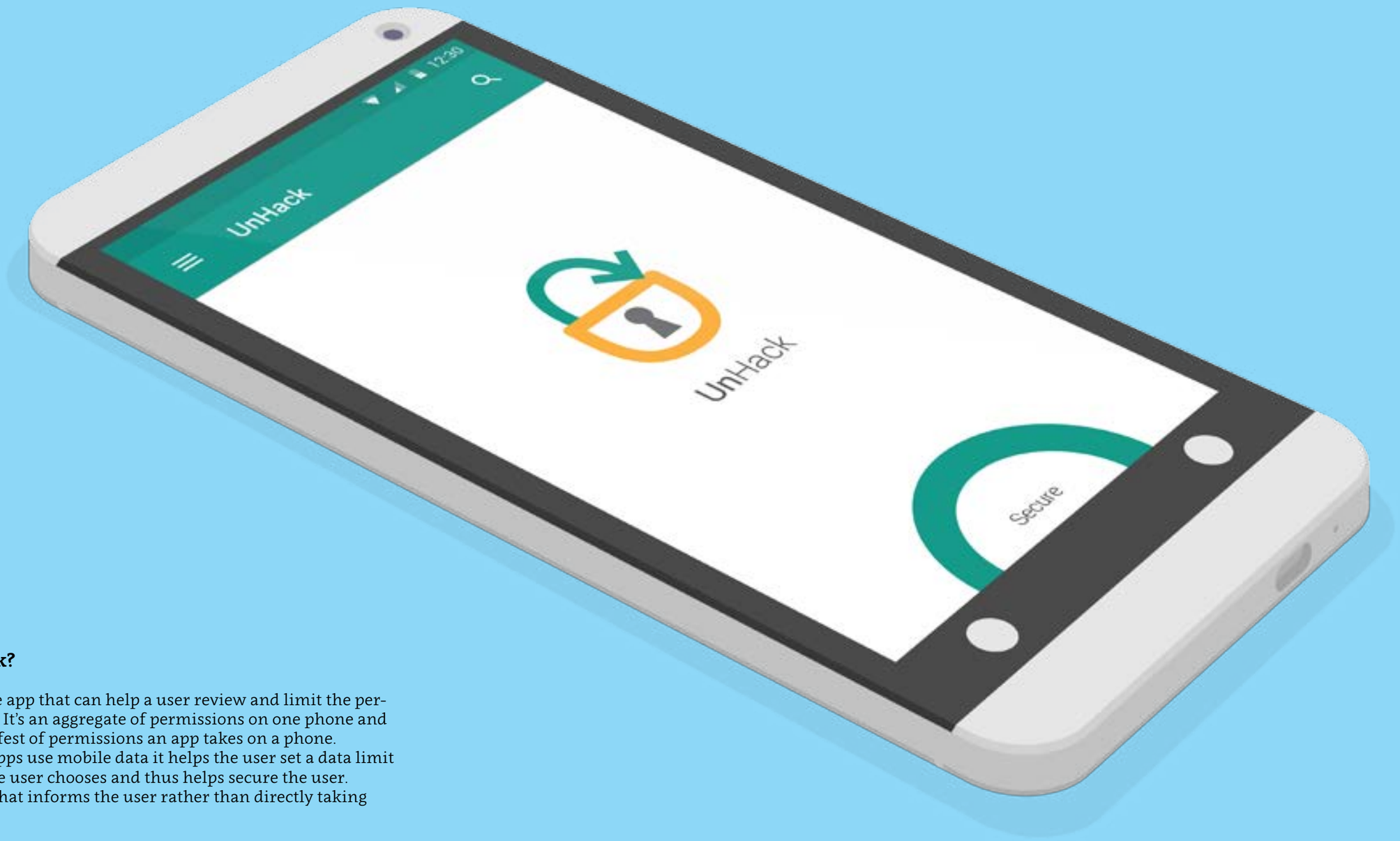
Introduction

One of the biggest reasons for the success of the Android platform is the wide array of applications and games available, and the open-source nature of the OS is such that this is set to grow exponentially for the foreseeable future. New Android users will have noted the speed and ease at which software can be downloaded and installed from the marketplace, but may also have raised an eyebrow at the rather scary looking requests for access to various content or features of a phone.

These permissions are present to act as a security measure in that they inform users of the various things the software will need to do in order to work as intended, and though it's not possible to manually select which to allow, can at least offer food for thought when choosing whether or not to install unknown applications.This is where UnHack comes in.



What is UnHack?

UnHack is a mobile app that can help a user review and limit the permissions of an app. It's an aggregate of permissions on one phone and works on the manifest of permissions an app takes on a phone.
Since most of the apps use mobile data it helps the user set a data limit cap on apps that the user chooses and thus helps secure the user.
It's a warning app that informs the user rather than directly taking any action.

Design Details

The Logo

Getting secure is a process with the UnHack app and the lock is a symbolism for that. A fully locked shackle is a symbol for a fully secure phone. The shackle doubles up as a UI element in the app. The 3 colours in the logo symbolizes the three modes of security in the app.

The shackles of a padlock were used as an element throughout the app. Thus the logo and the brand constantly engages the user.

Font and Colour

The colours are warm and convey a sense of security to the user. The 3 colours are also a symbolism of the security modes in the app

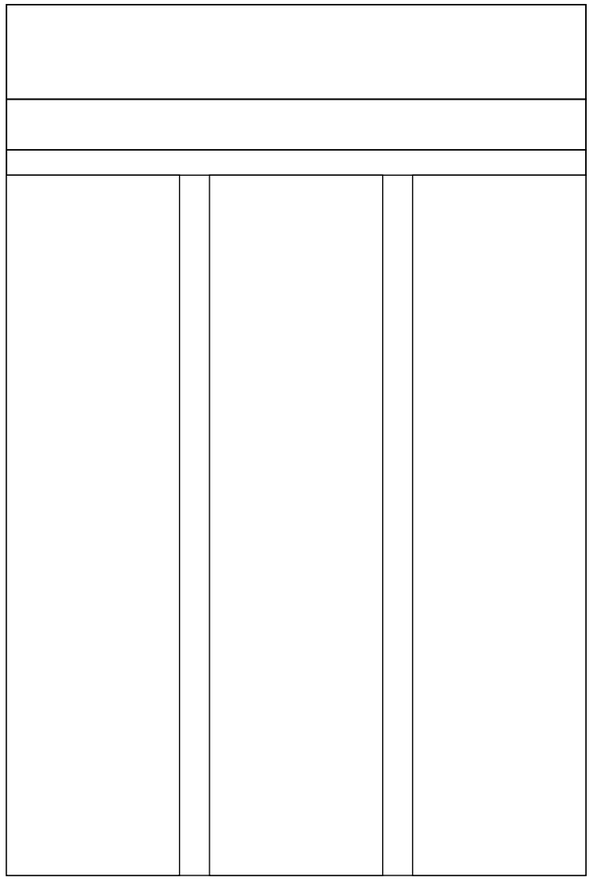
R 5 **G** 152 **B** 135

R 115 **G** 116 **B** 118

R 250 **G** 175 **B** 64

Grids

The app follows a primary 3 column grid based on the 3 threat levels that forms the basis of the UX in the app. Each of the top three panels are a subset of the previous one. The grids make it pretty easy for the user to follow the data provided in the app.



Font and Colour

Roboto has a dual nature. It has a mechanical skeleton and the forms are largely geometric. At the same time, the font features friendly and open curves. While some grotesks distort their letterforms to force a rigid rhythm, Roboto doesn't compromise, allowing letters to be settled into their natural width. This makes for a more natural reading rhythm more commonly found in humanist and serif types.

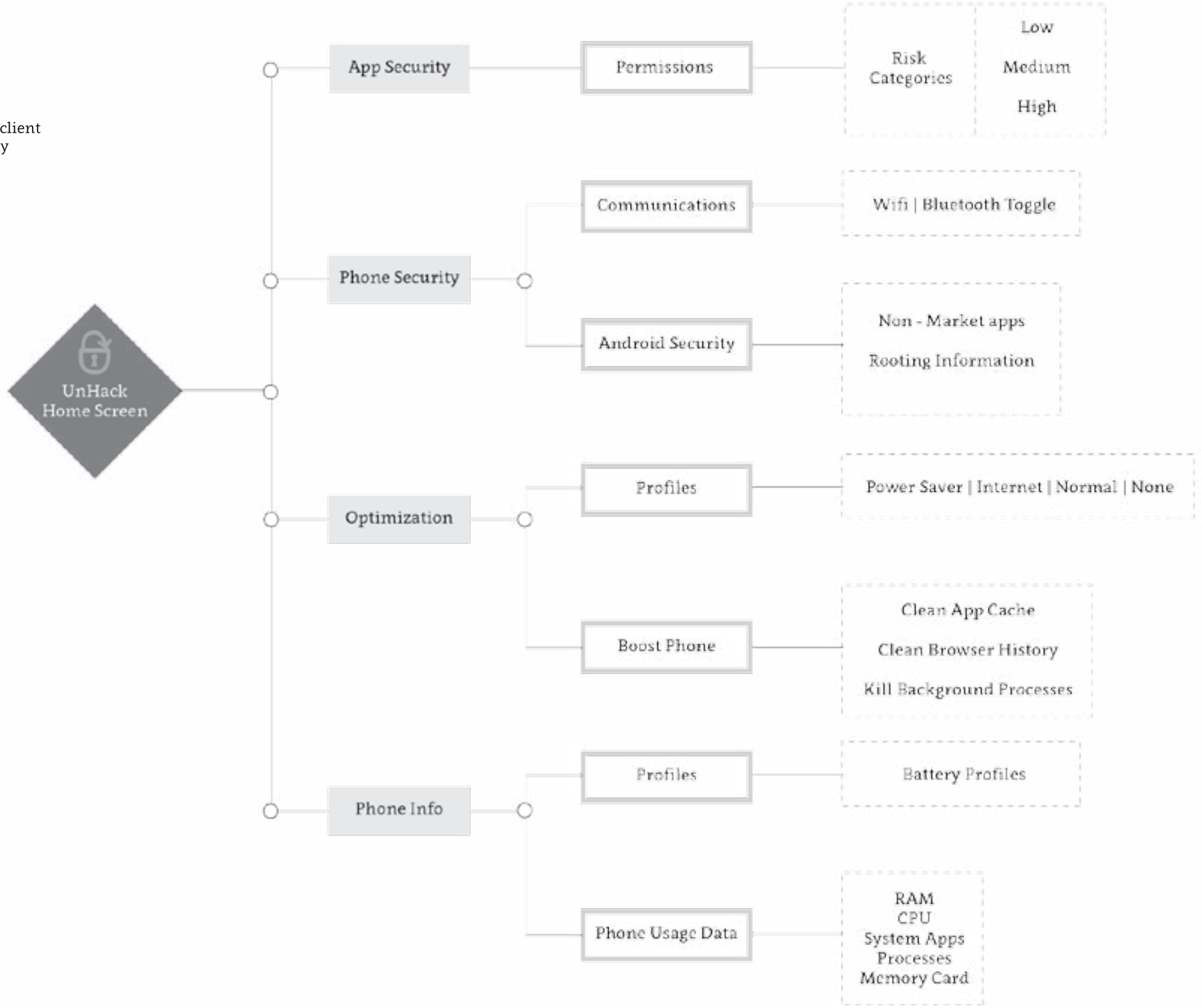
Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj
Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt
Uu Vv Ww Xx Yy Zz
0 1 2 3 4 5 6 7 8 9 0

Roboto Regular

Flow Chart

Original

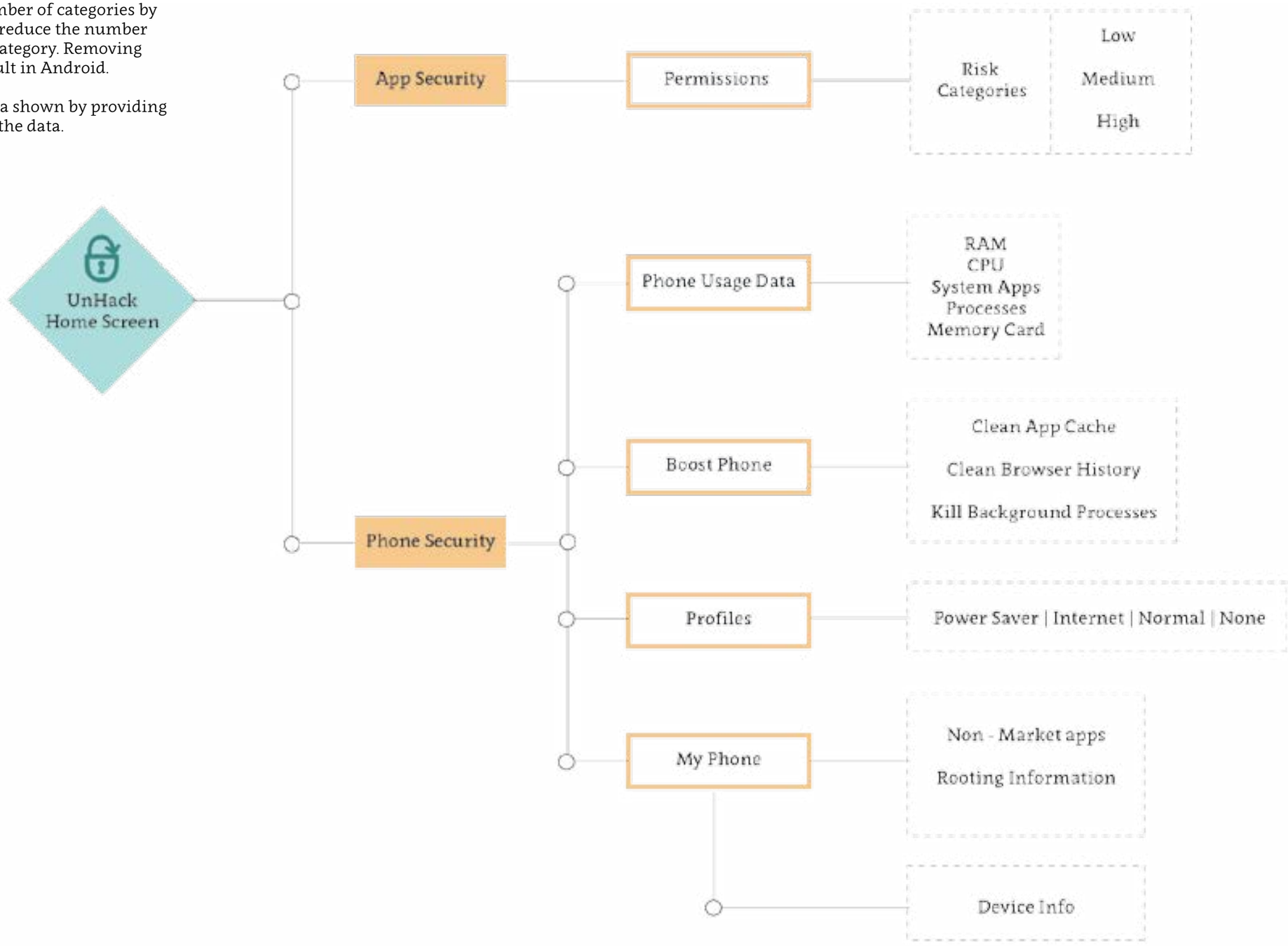
The initial flowchart that was provided by the client had a lot of redndant functions that are already present within android. Thus the task was to reduce the categories and provide the user a simpler experience.



Revised

The task was to reduce the number of categories by collating similar data sets and reduce the number of screens in the app security category. Removing redundant data found by default in Android.

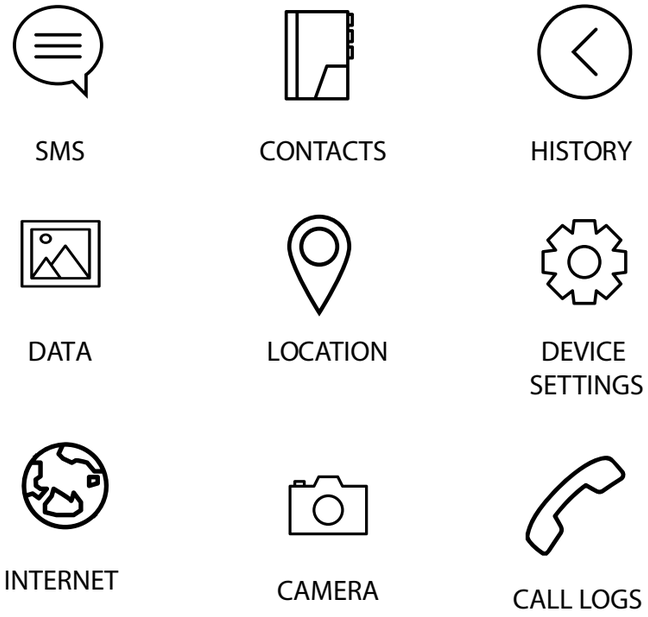
Providing a context for the Data shown by providing the user something to do with the data.

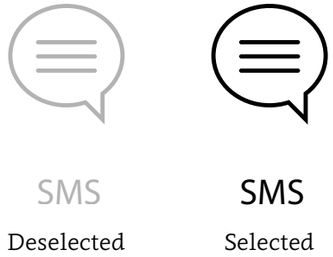


User Interface Details

UI Elements

UI elements are visual elements that we can see in our abpplications. The elements used in the UnHack app are very minimal and doesn't cause any clutter. The shackle forms a very important part of the UI design. It binds all the screens together.



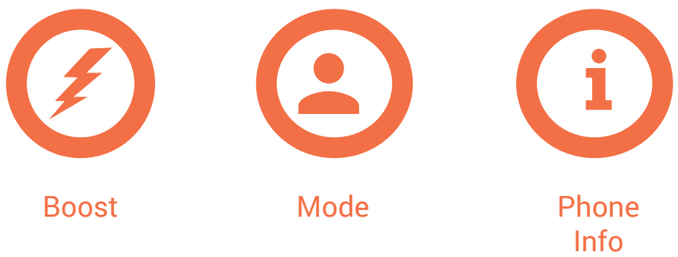


Icon Style

Minimal line icons that subtly get highlighted when selected in the application permssions window.

Performance window icons

These icons are slightly different owing to the different function that this window does.



Shackle

The shackle forms the biggest part of the UI design enforcing the brand throughout the user experience.

Layers

The illusion of layers and depth from Google's material design principles has been put to use here. There is a logic to the way elements move and behave in the app's user interface. This idea of Material Design lends itself to new layered visual language for Android's various apps.

LAYER 3 : Messages and popups are shown here in the app.

LAYER 2 : The Shackle and App menus are in this layer.

LAYER 1 : Permissions tab and the app icons are in this layer.

Implementation

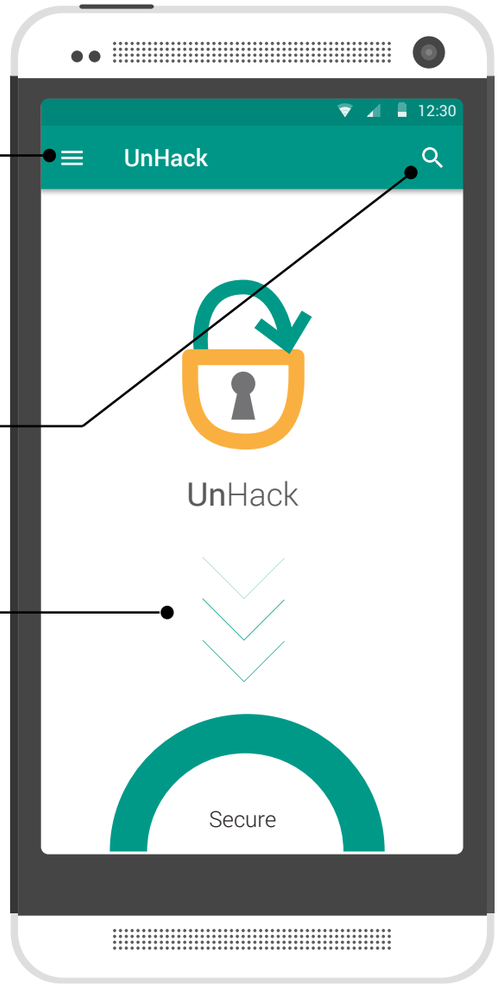
Home Screen

The home screen itself begins with a view of the UnHack logo and triggers the user to use the shackle functionality from the onset of using the app. The shackle at the bottom is a useful indicator.

Hamburger Menu: For additional app options.

Search: Search functionality for searching a specific app and directly going there.

Trigger: The first interaction with the app gives you a taste of how the UI of the app is designed.

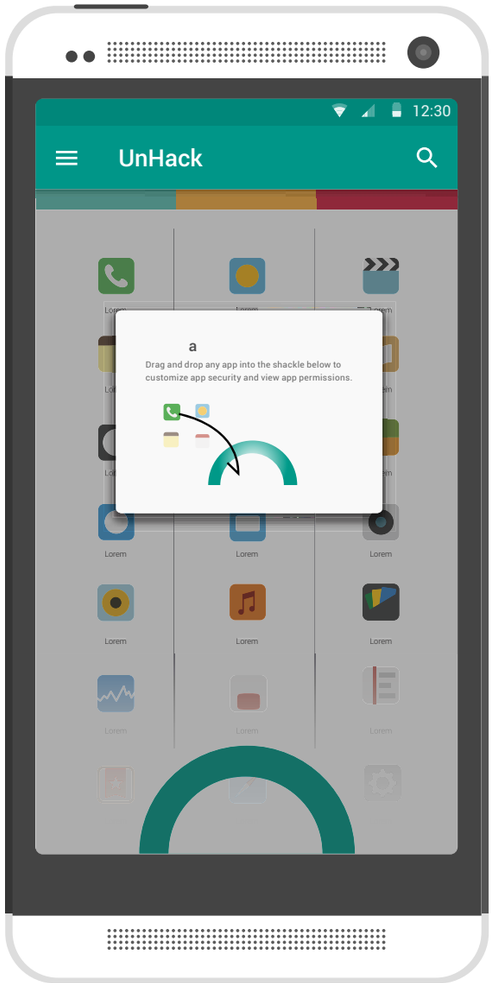


Drag and Drop: The user is expected to drop the logo in the shackle to begin their experience with the app.

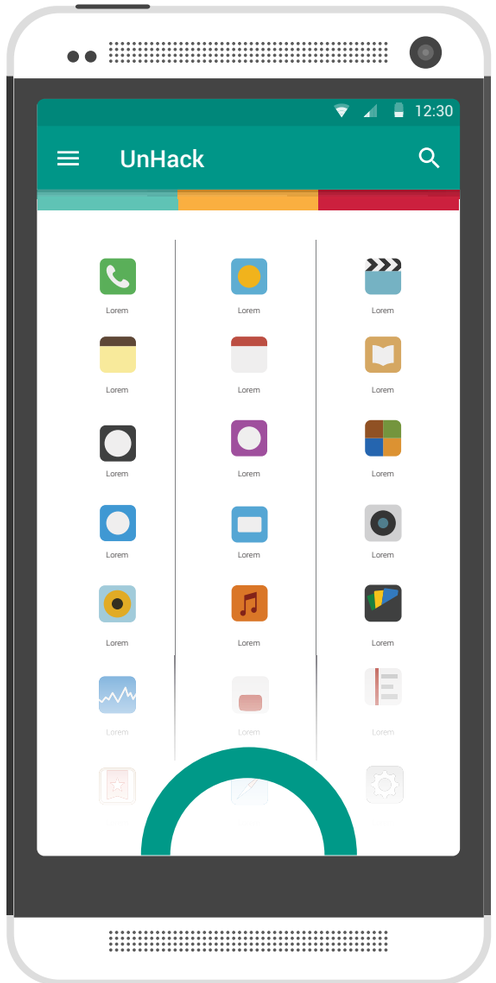
Shackle Meter: This gives you an overall idea of the security status of the phone

App Security Screen

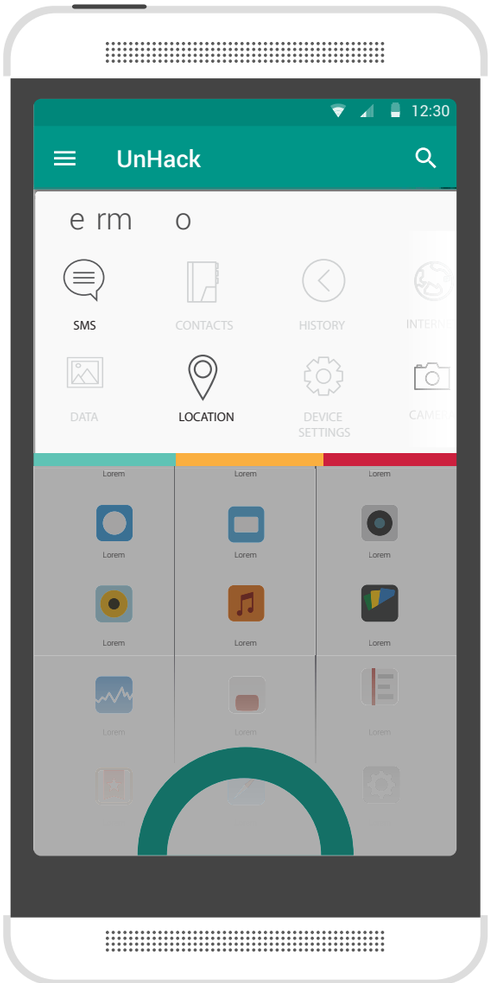
The app security screen is divided into three columns based on the threat level of a particular app. Users have to drag and drop the app into the shackle to view the app's status.



Tutorial Popups: The popups explain what all functions are available for the user.



App List: The apps are arranged according to the three risk categories. The white gradient at the bottom is for affordance.

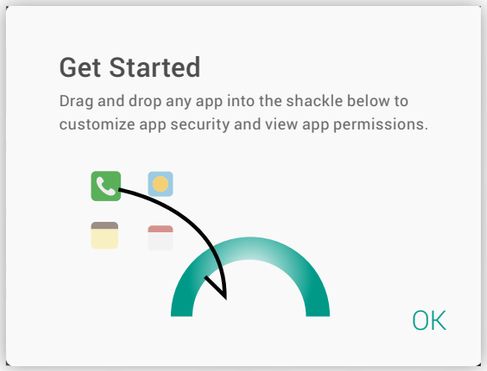


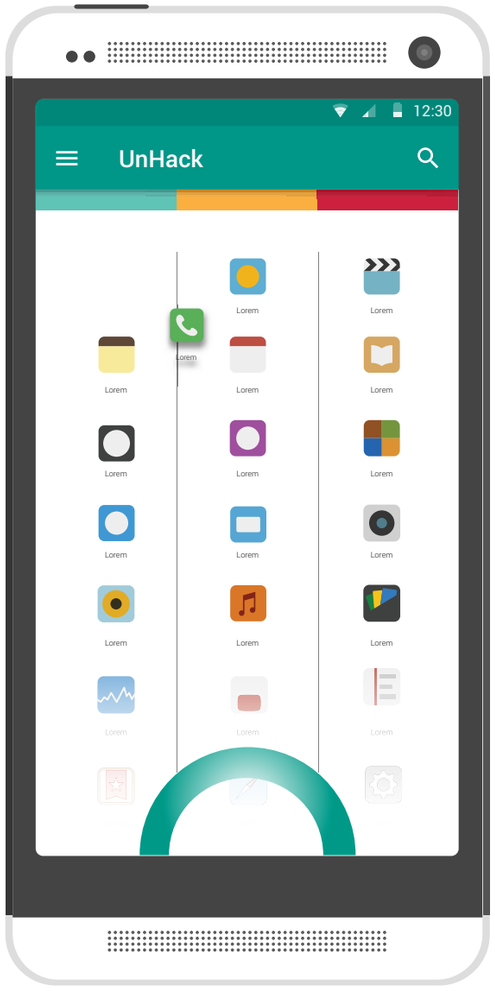
Permission List: The filter can be dragged down from above. The selected permissions would get highlighted and the unselected ones are greyed out.

Implementation

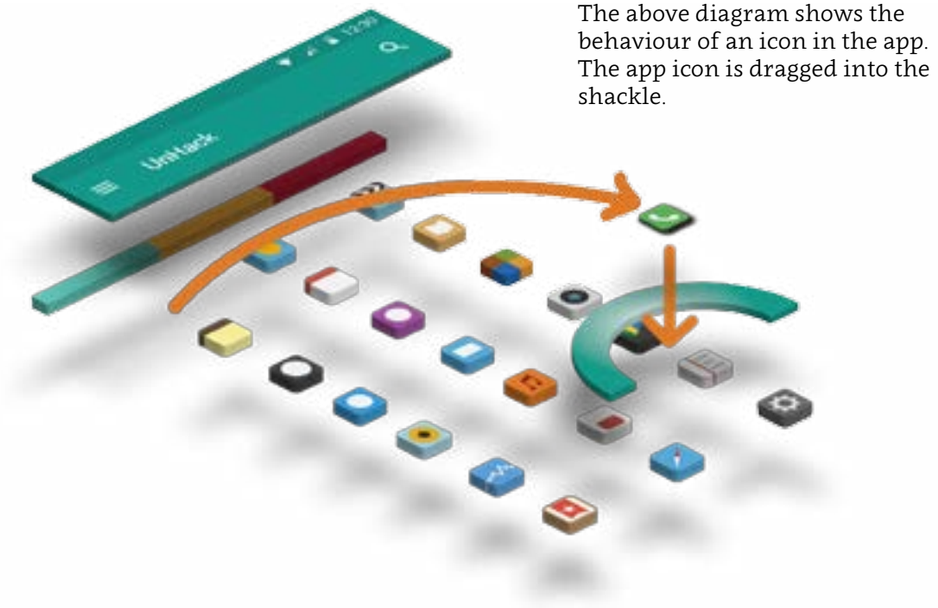
Selected App Settings Screen

As shown earlier the app has to be dragged into the shackle to view further settings. The app security screen allows the user to review all the apps present in the app, and then the user can decide what to open from here.





The selected app shows a drop shadow to indicate that it's in an upper layer. and then its dragged into the shackle.



The above diagram shows the behaviour of an icon in the app. The app icon is dragged into the shackle.

When an app is selected the shackle glows to indicate what to do with the icon.

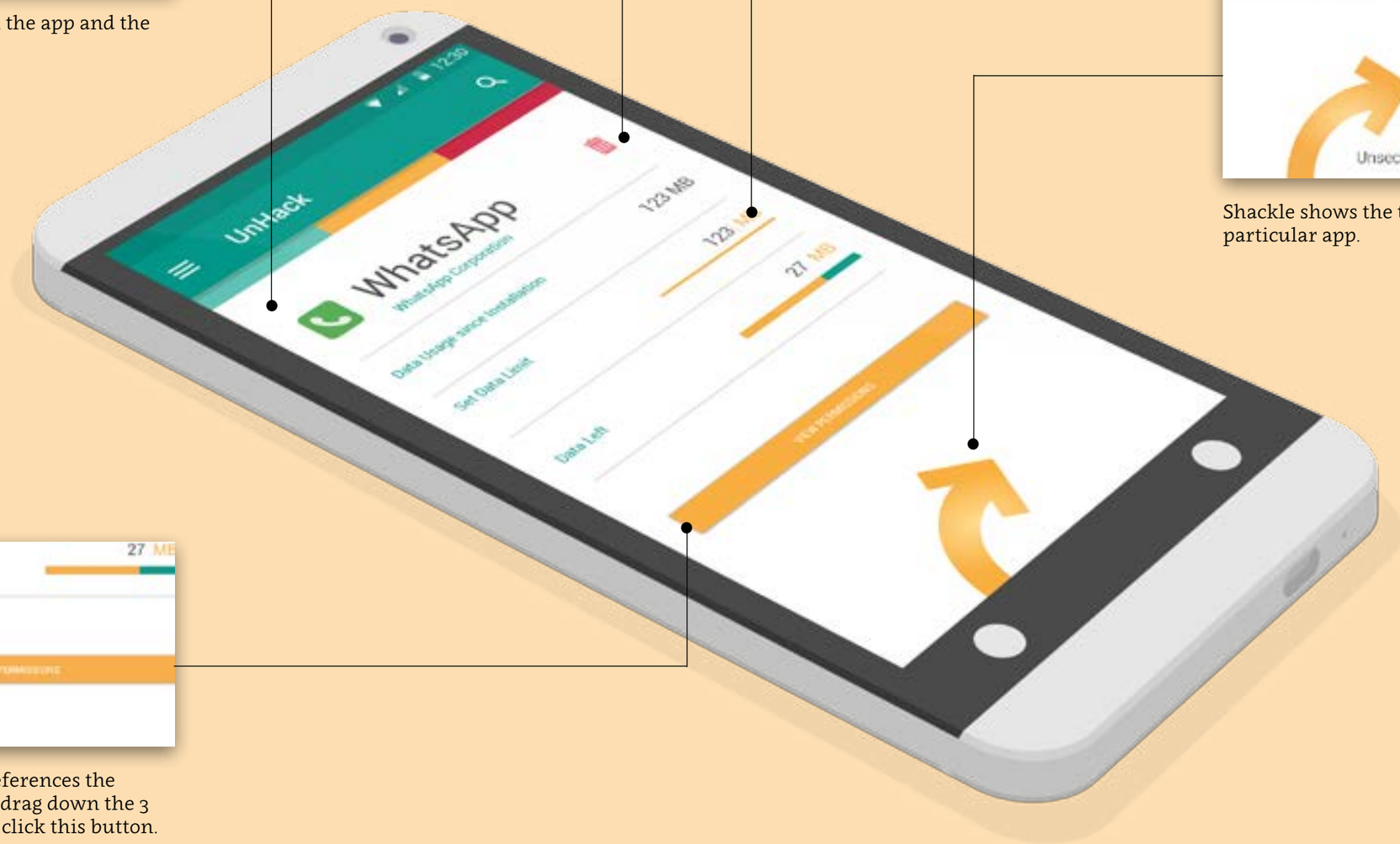
The selected app screen shows all the functionalities to control the app. You cannot change the permissions though.

To uninstall an app the user can click this

The user can set data limit for an app and the user gets a notification once the app reaches the data limit set.

Information on the app and the publisher.

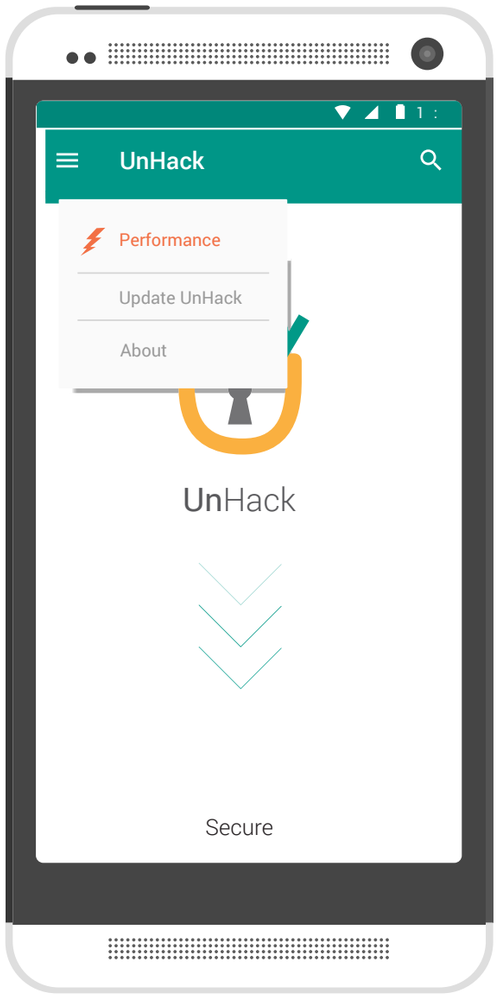
Shackle shows the threat of the particular app.



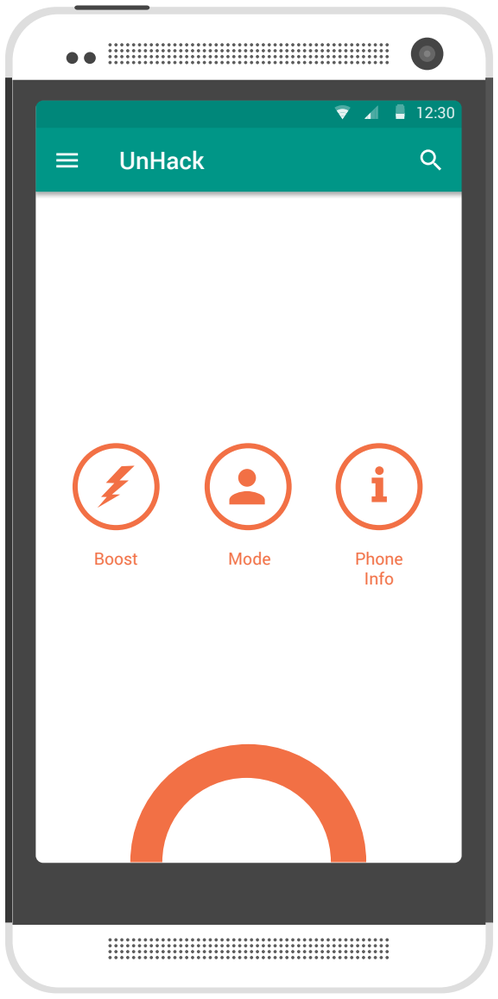
To view app preferences the user can either drag down the 3 coloured tab or click this button.

Performance

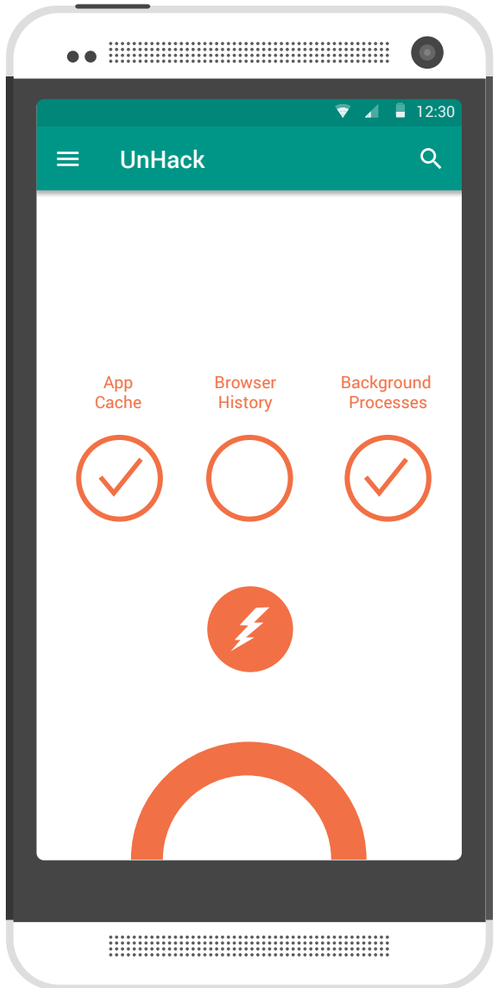
The performance screen can be accessed from the hamburger menu on the top. This section has been differentiated from the rest by an orange colour. This feature is an add on to optimize and view phone details.



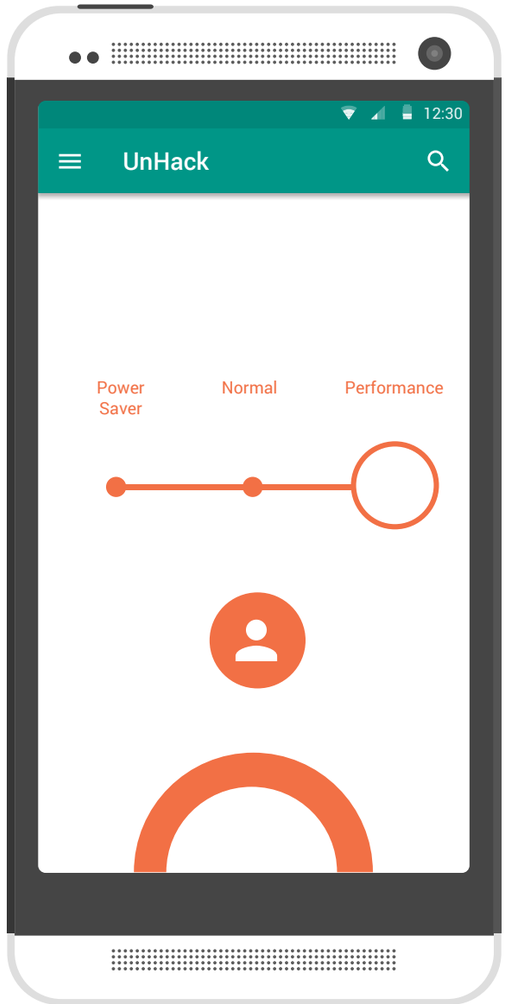
The hamburger menu also has informationa bout the app and update sections.



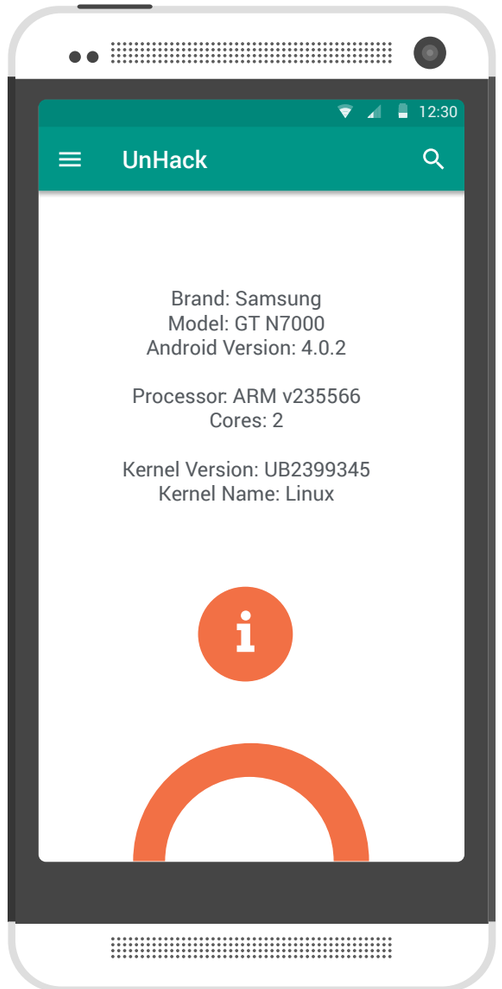
The performance screen has the 3 primary functionalities given in one go.



The boost screen has 3 options. When each option has been executed the circle goes empty.



The power saver screen shows a slider menu with 3 modes to choose from.



The information window allows you to view the phone model and android version details.

Learning Outcome

The exercise in designing an app helped me structure data and simplify it. This was also an exercise in brand implementation in a mobile app and how a simple logo can become an anchor point in designing a user experience.
The technicalities of designing an app such as the reolution and minimum and maximum font size were also a consideration in the design of this app.
Most importantly designing an app for a live project for an actual client provided real life constraints and each design decision was taken keeping the user in mind.